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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,867	11/18/2003	Patrick Duvaut	060707-1580	3126

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EXAMINER
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WANG, TED M

ART UNIT	PAPER NUMBER
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2611

MAIL DATE	DELIVERY MODE
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08/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/714,867	DUVAUT ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Ted M. Wang	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 June 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5 is/are rejected.
- 7) Claim(s) 6-11 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Response to Arguments***

1. The indicated allowability of claims 1-5 are withdrawn in view of the newly discovered reference(s) to Gaikwad et al. (US 6,317,495). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaikwad et al. (US 6,317,495).

- With regard claim 1, Gaikwad et al. discloses a method for implementing smart subscriber lines (DSL) to Long reach digital subscriber lines (LDSL) systems (column 4 lines 1-5, where the HDSL2 is considered as the long reach DSL), the method comprising:

presenting a number of spectral masks that are available on the LDSL systems (column 19 lines 20-32, where the transmit spectral is determined dynamically and Fig.30, 31 and 43-47); and

selecting from the number of spectral masks an upstream mask and a downstream mask based on pre-defined optimization criteria such that for a

given transmit power, channel capacity is maximized in both upstream and downstream directions (column 17 line 36-54) while spectral compatibility is maintained between upstream and downstream channels (column 19 lines 9-19 and column 40 lines 53-67) as well as with neighboring services (column 24 lines 48 – column 25 line 15, and column 28 lines 44-67 and column 38 lines 37-43).

- With regard claim 2, Gaikwad et al. further discloses wherein selecting the upstream mask and the downstream mask is performed during a modem start up period (column 19 lines 1-8).
- With regard claim 4, Gaikwad et al. further discloses wherein selecting the upstream mask and the downstream mask is performed automatically (column 19 lines 20-32, where the transmit spectral is determined dynamically or automatically and Fig.30, 31 and 43-47).
- With regard claim 5, Gaikwad et al. further discloses wherein the number of spectral masks further comprises a number of upstream masks (U1, U2, U3,..., Un) (Fig.31A, 45A, 46A, 47A) and a number of downstream masks (D1, D2, D3,..., Dn) (Fig.31B, 45B, 46B, 47B).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaikwad et al. (US 6,317,495).

- With regard claim 3, Gaikwad et al. further discloses wherein selecting the upstream mask and the downstream mask is performed automatically (column 19 lines 20-32, where the transmit spectral is determined dynamically or automatically and Fig.30, 31 and 43-47) but fails to teach wherein selecting the upstream mask and the downstream mask is performed manually.

Although Gaikwad et al. doesn't specifically wherein selecting the upstream mask and the downstream mask is performed manually, such limitation are merely a matter of design choice and would have been obvious in the system of Gaikwad et al. that teaches selecting the upstream mask and the downstream mask automatically. The limitations in claim does not define a patentably distinct invention over that in Gaikwad et al. since both the invention as a whole.

Therefore, to select the upstream mask and the downstream mask manually in Gaikwad's system would have been a matter of obvious design choice to one of ordinary skill in the art.

#### ***Allowable Subject Matter***

6. Claims 6-11 are objected to as being dependent upon an objected claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is 571-272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ted M Wang  
Examiner  
Art Unit 2611

Ted M. Wang

